Usability Test Plan of Maple Syrup App and documentation guide

By

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Group: GoggleFox

Scenario 1—documention guide test

Test Goals:

- To evaluate the content, organization, style and design of the documentation

- To assess how usable the document is

- To test the clarity, brevity and syntactic quality of user documentation

- To determine the ease of use of the documentation

- To assess the simplicity or difficulty of the documentation

- To assess how document can help you learn how to tap trees, record information and produce sugar and syrup

Quantitative measurement list:

- How long did it take you to identify the information you need?

- How much task were you able to accomplish with the help of the documentation?

- How many times did you call for help?

- What number of commands or instructions didn't you use?

- How many steps did you have to go through in order to complete a task?

Scenario description:

You are a maple syrup enthusiast and you have sought for ways you can tap trees in an easy and enjoyable manner. You also wished you could keep track of your tapings: when is it appropriate to tap, what supplies are necessary to carry along? Fortunately, you bought a smart phone that has an app that can help solve most of the problems you are pondering over. But, how can you use the app on the smart phone? You found yourself in the midst of a lot of trees in a cold spring day in Northern part of United States. You are definitely sure maple sugarbushes are close to where you are. You turned to your smart phone and you realized that the mobile app can help you identify the trees and help you tap. You don't do this often but you turned to the documentation section to view the user manual that contained instructions that can help you navigate your way through the app.

Task list:

Use the documentation manual to:

- Find where you can enter information about your tap

- Find how you can enter information about the tap

- Find out how you can save information for later use

- Find out the steps you will go through in order to tap maple tree

- Tap maple tree with ease

- Identify the appropriate moment to tap

- Access the calculator and use it to calculate aspects of syrup yield

Qualitative measurement:

- How easy were you able to use the document?

  1   2   3   4   5   6   7   8   9   10

- Did you find it easy to navigate through the document?

  1   2   3   4   5   6   7   8   9   10

- To what extent was the document useful and usable?

  1   2   3   4   5   6   7   8   9   10

- What positive features about the documentation can you recall?

- How easy were you able to learn the document?

  1   2   3   4   5   6   7   8   9   10

- How useful was the document?

  1   2   3   4   5   6   7   8   9   10

- How motivated are you to use the app?

  1   2   3   4   5   6   7   8   9   10

- How motivated are you to recommend the app to others?

  1   2   3   4   5   6   7   8   9   10

Post scenario interview or questionnaire

Evaluate the content

Identify any irrelevant information:

Do you see any gaps in the information? Indicate.

What information is inaccurate?

Does the documentation include a title, a brief overview or introduction?

Does the document contain cautions, warnings and dangers of using the app?

What other problems does the content present?

Evaluate the style

Identify anything that you did not understand on first reading

What couldn't you understand at all?

Could you identify expressions that seem wordy, inexact, or too complex?

List other problems with the style

Evaluate the organization

Is there anything that is out of order or hard to locate or follow? State those things.

What problems does the organization pose?

Evaluate the design

Indicate any headings that are missing, confusing, or excessive

Give examples of material that might be clarified by a visual

Give examples of misleading or overly complex visuals

List other problems with design of documentation

Identify anything that seems misleading or that could create legal problems or cross-cultural misunderstanding

Kindly suggest alternative ways of making this document easier to use

Bug report form

Name of experimenter: Isidore Kafui Dorpenyo

Name of participant:

Bug number	Bug name	Location	Description

Test set up details

The testing will take place in the usability testing center at Rekhi hall. It is a quiet room that is set up for usability testing. Present in the room is a camera that records the process. At each point of the test, there will be about four students in the room: three undergraduate students and one graduate student. One undergraduate student (a SC major preferably) will be available to explain the functionality of the app. Other undergraduate students present will observe and take notes, keep time or offer help to participants. The graduate student will mostly serve as the test administrator.

Participants will be served with mobile phones that have apps. There will be one participant at each testing time and testing time will not exceed sixty minutes. The participant will test the app by using it to accomplish tasks. Participant will be required to answer some questions about the app and its documentation.

Scenario 2: user-centeredness of maple app

Test Goals:

- To test the extent to which app can help first time users tap maple syrup easily and quickly

- To assess how user can download and install app easily and quickly

- To assess how user can identify and use the key tools quickly and easily

- To assess how efficient and learnable the app is

- To improve user's perception of the quality of the app's interface

- To assess how easy users can remember the system

- To reduce the number of errors users make when they use the app

Quantitative measurement

- State the number of commands or features you did not use

- State the number of commands or features you utilized

- State the number of times you expressed frustration

- Record the time you took to complete your task

- Record the number of errors you committed

- How long did it take you to recover from errors?

- How frequent did you use the manual. State the number of times you referred to it.

- How frequent did the manual help you to solve your problem?

- Strike a ratio between the number of times you were successful using the app and the number of errors you committed

- How many times did the system divert your attention from the main task?

Scenario description:

I am a maple syrup enthusiast. I love to tap maple trees for fun and sometimes I make some few dollars from the sale of the syrup. I am so excited that I got a smart phone that has an app that can help me tap trees; calculate the number of taps and record information on taps. You found yourself in the midst of a lot of trees in a cold spring day in Northern part of United States. You are definitely sure maple sugarbushes are close to where you are. You are definitely sure maple trees are close to where you are. You turned to your smart phone and you realized that the mobile app can help you identify the trees and help you tap. Now, you have to find out how to navigate the system.

Task list:

Main task is to use the app to produce maple syrup

- Sign up and use app

- Use the app to select a site

- Use the app to look for maple tree and tap

- Log data into application

- Save data and continue

Qualitative measurement

To what degree do you agree or disagree with the following statements about the system:

- It was very easy to learn how to use the system

    1   2   3   4   5   6   7   8   9   10

- Using this system was a frustrating experience

    1   2   3   4   5   6   7   8   9   10

- I feel that this system allows me to achieve very high productivity

    1   2   3   4   5   6   7   8   9   10

- I worry that many of the things I did with this system may have been wrong

    1   2   3   4   5   6   7   8   9   10

- This system can help me achieve all the tasks I want to accomplish

    1   2   3   4   5   6   7   8   9   10

- The system is very pleasant to work with

    1   2   3   4   5   6   7   8   9   10

- Icons are easy to identify and understand

    1   2   3   4   5   6   7   8   9   10

Post scenario interview or questionnaire

1. Please indicate your level of agreement to the follow statement:

   Overall, this android application was easy to perform the task.

   1. Strongly agree
   2. Agree
   3. Neutral
   4. Disagree
   5. Strongly disagree

2. Please indicate your level of agreement to the follow statement:

   I enjoy using this android application.

   1. Very much
   2. A little bit
   3. Neutral
   4. Not very much
   5. Not at all

3. Please indicate your level of agreement to the follow statement:

   I would use this android application again.

   1. Strongly agree
   2. Agree
   3. Neutral
   4. Disagree
   5. Strongly disagree

Bug report form

Name of experimenter: Isidore Kafui Dorpenyo

Name of participant:

Time: **Date:**

Bug number	Bug name	Location	Description

Test set up details

The testing will take place in the usability testing center at Rekhi hall. It is a quiet room that is set up for usability testing. Present in the room is a camera that records the process. The room is large enough so participants can position and reposition themselves. At each point of the test, there will be about four students in the room: three undergraduate students and one graduate student. One undergraduate student (a SC major preferably) will be available to explain the functionality of the app. Other undergraduate students present will observe and take notes, keep time or offer help to participants. The graduate student will mostly serve as the test administrator.

Participants will be served with mobile phones that have apps. There will be one participant at each testing time and testing time will not exceed sixty minutes. The participant will test the app by using it to accomplish tasks. Participant will be required to answer some questions about the app and its documentation.

Pre-test questions

1. How many years have you used a smart phone?

2. Please indicate your level of agreement to the follow statement:

   I am very interest in the testing of this android application.
   1. Strongly agree
   2. Agree
   3. Neutral
   4. Disagree
   5. Strongly disagree

Computer User Interface Usability Testing

You are being invited to participate in a research study to determine the usefulness and usability of computer user interfaces. This study is being conducted by Dr. Robert Pastel of Michigan Technological University Computer Science Department and students in Dr. Pastel's Human-Computer Interaction (HCI) courses. The students are performing the usability tests as part of their project and to fulfill the HCI course requirements.

There are no known risks if you decide to participate in this research study. There are no costs to you for participating in the study. The information you provide and tasks that you will perform will determine the usefulness and usability of user interfaces. The questionnaires and the tasks should take less than an hour to complete. The information collected may not benefit you directly, but the information learned in this study should provide more general benefits.

The questionnaires and test are anonymous. Do not write your name on the survey. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study except for the instructor of the class that is giving you credit for participating. Should the data be published, no individual information will be disclosed.

Your participation in this study is voluntary. By completing the questionnaires and performing the tasks, you are voluntarily agreeing to participate. You are free to decline to answer any particular question you do not wish to answer or not to perform a task for any reason.

If you have any questions about the study, please contact Dr. Robert Pastel, Assistant Professor, Computer Science Department, Michigan Technological University, Houghton, MI 49931.

The MTU Institutional Review Board has reviewed my request to conduct this project. If you have any concerns about your rights in this study, please contact Joanne Polzien of the MTU-IRB at 906-487-2902 or email jpolzien@mtu.edu.

Participant signature and date: